



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,943	02/11/2004	Brian Robert McClain	SJO920030045US1	4264
45216	7590	05/14/2007		
Kunzler & McKenzie 8 EAST BROADWAY SUITE 600 SALT LAKE CITY, UT 84111			EXAMINER NEWTON, JARED W	
			ART UNIT	PAPER NUMBER
			3692	
			MAIL DATE	DELIVERY MODE
			05/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/776,943  
Filing Date: February 11, 2004  
Appellant(s): MCCLAIN ET AL.

**MAILED**

**MAY 14 2007**

**GROUP 3600**

---

Brian C. Kunzler  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed February 7, 2007 appealing from the  
Office action mailed August 7, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,286,794	HARBIN	9-2001
6,945,412	FELCMAN ET AL.	9-2005
6,783,105	ODDSEN, JR.	8-2004

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 5, 10, 11, and 22 are rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent No. 6,286,794 to Harbin (hereafter Harbin).

*In regard to claim 1*, Harbin discloses an apparatus for compactly storing computer devices (see FIG. 1) comprising:

an upper support (16) comprising a rigid material forming a planar vertical back with substantially perpendicular edge protrusions along planar vertical back edges and configured to receive a display device (74) (not shown) (see FIG. 4; col. 5, lines 41 – col. 6, line 9);

a lower support (26) comprising a rigid material forming a tray configured to receive a keyboard and an integrated pointing device (see FIG. 1; col. 5, lines 43-47);  
and

a mounting mechanism (comprising solid arm (18), carriage (24), and dual parallelogram arm assembly (28) – see FIG. 1) that connects the upper support (16) to the lower support (26) and allows the upper support and the lower support to transition between an access position and a vertical storage position (see abstract), the mounting mechanism mounted to a computer equipment rack (comprising column member (38) and CPU tray (12)) such that the vertical storage position is outside of the computer equipment rack and places the upper support and lower support behind a face (i.e. face defined by open track (46) shown in Figure 1) of the computer equipment rack, wherein

Art Unit: 3692

the computer equipment rack is configured to mount equipment (58) with a height that is an integer multiple of 44.45 millimeters and the face is configured as a virtual vertical plane of the computer equipment rack wherein a user may access equipment mounted (e.g. central processing unit (CPU) (58)) within the computer equipment rack.

*In regard to claim 5*, Harbin further discloses said mounting mechanism (18), (24), and (28), as configured to slide the upper support (16) and lower support (26) between the access position and the vertical storage position along the rack (38) (see FIG. 1) (see col. 2, lines 27-43).

*In regard to claims 10 and 11*, Harbin further discloses an access position wherein said upper and lower supports are each in a non-vertical orientation (see FIG. 1) (see col. 2, line 33).

*In regard to claim 22*, the column member (38) is a frame member of the rack (see FIG. 1).

Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 6,286,794 to Harbin, alone.

In regard to claim 21, Harbin discloses the device as set forth above, and further recites, "Various other embodiments and ramifications are possible within its scope. For example, motorizing the travel of the carriage 24 and/or the dual parallelogram arm assembly 28 would facilitate use by the handicapped" (see col. 8, lines 35-38).

Harbin sets forth the inclusion of means of motorizing the transition of the device between the access position and a vertical storage position, but does not explicitly set forth the details of said motor.

The examiner takes official notice that it was well known in the art at the time of the invention that a motorized carriage as disclosed by Harbin would include a gearing, switch, power supply, and motor. It would have been obvious to one of ordinary skill in the art at the time of the invention to include these well-known components to accomplish Harbin's desired motorization of the carriage.

Claims 1, 5, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,945,412 to Felcman et al. (hereafter Felcman), in view of US Patent No. 6,783,105 to Oddsen, Jr. (hereafter Oddsen).

Felcman discloses a component mounting rack (11) for storing components having a dimension corresponding to a U, or 44.45 millimeters (see Abstract), said rack having panel dividers (80) defining a virtual vertical plane of the rack (see e.g. FIG. 4), and an internal keyboard and monitor mounting assembly (28) (see FIG. 5).

Felcman does not disclose:

- (a) An upper support and a lower support mounted to a mounting mechanism that allows the upper support and the lower support to transition between an access position and a vertical storage position, the mounting mechanism mounted to the rack so that it places the upper support and lower support behind a face of the computer equipment rack (claim 1);

- (b) Said mounting mechanism configured to slide the upper and lower supports between the access position and the vertical storage position (claim 5);
- (c) Said mounting mechanism mounted to a frame member of the computer equipment rack (claim 22); and
- (d) Said mounting mechanism mounted to a divider panel of the computer equipment rack (claim 23).

Oddsens discloses an adjustable display arm (100) for mounting computer components (102) (see FIGS. 3 and 20).

*With respect to (a)*, Oddsens discloses an upper support (136) comprising a rigid material for supporting a monitor (102), said upper support (136) comprising arms (140) having a planar vertical back and substantially perpendicular edge protrusions for receiving rod (134) (see FIGS. 3 and 20); a lower support comprising a rigid material, and receiving a keyboard (104) (see FIG. 3); and a mounting mechanism (101) and (103) that connects the upper support to the lower support and allows the upper support and the lower support to transition between an access position and a vertical storage position (see col. 1, lines 59-62).

*With respect to (b)*, Oddsens discloses said mounting mechanism (101) and (103) configured to slide between the disclosed access and storage positions (see col. 2, lines 1-4).

The Felcman and Oddsens references are analogous art because they are from the same field of endeavor—compact component equipment storage. It would have

Art Unit: 3692

been obvious to one of ordinary skill in the art at the time of the invention to attach the adjustable mounting arm as disclosed by Oddsen to the rack (11) as disclosed by Felcman. *With respect to (c) and (d) above*, it would have been further obvious to attach the mounting arm of Oddsen to either a frame member or a divider panel of the rack disclosed by Felcman.

Felcman discloses a component mounting rack convenient for internally storing a display and keyboard device; however, the disclosed storing means still requires the use of internal space that could otherwise be used for additional hardware not needed to be accessed intermittently by a user. Oddsen sets forth the undesirability of such an arrangement, reciting, "Rather than placing such components directly on a desk or other supporting surface, display arms are used to keep the component elevated from the surface... The devices can save desktop space, but still render an otherwise vacant area occupied with the electronic components" (see col. 1, ln. 19-28). Oddsen proceeds to set forth a solution to this problem, reciting, "The present invention is directed to a display arm that can be raised and lowered with minimal exertion while supporting an electronic device. The display arm of the present invention allows computer components and the like, that may be used intermittently, to be stored at an elevated level while being made accessible at a lower level for ease of use" (see col. 1, ln. 56-62). It follows that it would be desirable and successful to attach the adjustable arm assembly disclosed by Oddsen to the rack disclosed by Felcman, to support the display and keyboard, and thereby free up internal space within said rack.

**(10) Response to Argument**

The arguments set forth in the brief have been considered, but are ineffective.

*With respect to Argument I*, the Appellant asserts, "Harbin does not disclose a mounting mechanism that allows an upper support and a lower support to transition between an access position and a vertical storage position" (Brief at ¶ [006]). On the contrary, Harbin states, "A computer workstation mounting device is provided which permits devices to be accessed by operators in a variety of positions including sitting, standing, or from a wheel chair. The invention permits said devices to be moved in a wide variety of vertical, horizontal, and rotational ranges of motions, and permits the devices to be moved clear of the work area while performing other tasks, or safely moved to a position near the ceiling for security or additional workspace conservation" (see Abstract). Given their broadest reasonable interpretation in view of the disclosure, *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997), the claimed limitation "access position" is met by the Harbin's teaching of providing access to devices at various positions. Likewise, the limitation "vertical storage position" is met by Harbin's teaching of the device being vertically cleared out of a work area while a user is performing other tasks.

Appellant further asserts, "Harbin does not teach that the vertical storage position is outside of a computer equipment rack and places the upper support and lower support behind a face of the computer equipment rack. Harbin does not include a computer equipment rack." (Brief at ¶ [007]). On the contrary, Harbin discloses a

computer equipment rack, wherein a rack is defined as a framework or stand for holding or supporting an object. Harbin teaches the column (38) attached to the CPU tray (12) that directly supports the CPU (see FIG. 1). These teachings clearly bring the device of Harbin within the definition of a framework or stand for supporting an object. Further, the rack supports computer equipment, including said CPU and data cables, which are equipment employed to power the input/output devices supported by the mounting device. Finally, the carriage assembly attaches the upper (16) and lower supports (26) outside of the computer rack column (38) (as shown in Figure 1), allowing the vertical storage position to be behind some face of the computer rack. For instance, the right-hand side of the rack when viewed in Figure 1 (i.e. the side including the channel running downwardly longitudinally along it) defines a face of the rack, and the dual parallelogram arm assembly (28) enables the upper and lower supports to be positioned directly behind the face for storage.

Appellant further asserts, "Harbin does not disclose that the computer equipment rack is configured to mount equipment with a height that is an integer multiple of 44.45 millimeters." (Brief at ¶ [008]). This argument fails for two reasons. First, a piece of "equipment with a height that is an integer multiple of 44.45 millimeters," as recited in claim 1, is not a required part of the claimed invention. Thus, a prior art reference need only be capable of supporting such a piece of equipment. The Examiner maintains that the column (38), or CPU tray (12) disclosed by Harbin is more than capable of supporting some piece of computer equipment that is an integer multiple of 44.45 millimeters, for instance a cable having a length of 4445 millimeters. Secondly, the CPU

tray (12) of Harbin does indeed support a computer central processing unit (58), which commonly has a height that is an integer multiple of 44.45 millimeters, or the dimension of a "U," which is a well-known dimension in the art used to maintain uniformity among the heights of computer equipment.

Appellant did not address the merits of the rejections of claims 5, 10, 11, and 22 under § 102(b) based on Harbin, aside from asserting that they should be allowed as being dependent on claim 1. (Brief at [009]). In view of the foregoing bases of rejection and response to arguments regarding the rejection of claim 1 by Harbin, the rejections of claims 5, 10, 11, and 22 should be upheld.

*With respect to Argument II*, the Appellant asserts that the Examiner has not established a *prima facie* case of obviousness in view of the Harbin reference alone. As set forth in Argument section I, Appellant asserts, "Harbin does not disclose a vertical storage position." (Brief at ¶ [015]). As set forth above, Harbin teaches the vertical storage position, obviating Appellant's argument regarding the rejection of claim 21 under § 103(a) in view of Harbin.

*With respect to Argument III*, the Appellant first asserts that the combination of the Felcman and Oddsen references under § 103(a) do not include all of the elements of the claimed invention (See generally, Brief at ¶¶ [022]-[023]). In particular, the Appellant asserts that, "Felcman shows a horizontal storage position within a computer equipment rack and a horizontal access position outside of the computer equipment

Art Unit: 3692

rack, but no vertical storage position” and “Oddsen is always in a horizontal access position, even when the computing device is elevated out of the way. Oddsen Fig. 1.”

(Id.) The Examiner does not dispute that Felcman shows a horizontal storage position and a horizontal access position. Indeed, the Examiner relied on Oddsen for its teaching of the respective access and storage positions, to overcome the lack thereof in Felcman.

The Examiner maintains that Felcman in view of Oddsen discloses all the elements of claims 1, 5, 22, and 23. In particular, Oddsen recites, “The display arm of the present invention allows computer components and the like, that may be used intermittently, to be stored at an elevated level while being made accessible at a lower level for ease of use” (see col. 1, lines 58-61). Therefore, Oddsen clearly discloses access and storage positions. Oddsen further recites, “An adjustable display arm is described in accordance with one embodiment for positioning an electronic component in a plurality of vertical positions” (see col. 1, lines 65-67). When the claim limitation, “vertical storage position” is given its broadest reasonable interpretation in light of the disclosure, it is met by the explicit recitation of Oddsen.

The Appellant further argues that there is no suggestion to combine the Felcman and Oddsen references. (Brief at ¶ [024]). Appellant recites, “Oddsen teaches away from computing device storage that occupies vacant areas by being mounted on desks or supporting surfaces ... Oddsen is instead directed to conserving floor space.” (Id.) First, the Examiner maintains that the Felcman and Oddsen references are analogous art because they seek to solve the same problem—compact input/output device

Art Unit: 3692

storage. Secondly, the Examiner agrees that conservation of floor space is one advantage Oddsen's invention aims to accomplish (see col. 1, line 29); however, it is only part of the overall motivation of conserving space in general (see col. 1, lines 19-20). It is this motivation that would lead one of ordinary skill in the art to combine the references.

Felcman discloses an input/output device attached to a rack, wherein the device occupies space within the rack when not in use. Oddsen notes the disadvantage of storing input/output devices within a supporting surface—namely that they occupy otherwise vacant space (see col. 1, lines 23-28). Oddsen solves the problem by providing a means for supporting the input/output devices in a storage position outside of the otherwise vacant space. It follows that applying the apparatus and teachings of Oddsen to the rack of Felcman would free up the otherwise vacant space occupied by area within the rack that supports the input/output device.

The Appellant further recites, "Felcman teaches away from mounting a computing device outside of the computer equipment rack." Indeed Felcman does not contemplate storage of input/output devices outside of the rack; however, Oddsen presents an improvement for racks and other supporting surfaces that have only contemplated internal storage. Providing the Felcman rack with the mounting assembly taught by Oddsen would not teach away from Felcman, but rather would allow Felcman to more efficiently utilize the interior of the rack, while storing the intermittently used input/output devices outside of the rack. The attachment of mounting assembly of Oddsen would not render the rack of Felcman inoperable; rather it would complement

its intended use of providing storage space inside a rack. *Cf. In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

The Appellant further recites, "Mounting the vertical telescoping arm of Oddsen to a computer equipment rack at roughly the height of the user destroys the utility of Oddsen." (Brief at ¶ [026]). The Examiner maintains the opposite. The embodiment shown by Oddsen as attached to a wall does not preclude the invention from being attached to another surface, including a rack such as the rack disclosed by Felcman. Further, attachment of the mounting assembly to the upper portion of a rack would be a successful implementation, as it would enable a user to pull the input/output devices down to a reasonable height for use, and return the devices to the upper portion of the rack for storage.

*With respect to argument IV*, it is noted that Appellant's arguments in the brief are labeled "V" instead of "IV," which corresponds to the "Grounds of Rejection" section. The Appellant asserts, "the Examiner did not consider the arguments directed to Claim 1 in the response of October 10, 2006 to the final rejection of August 7, 2006." Although the Examiner erroneously implied in the Advisory Action mailed October 27, 2006 that the Applicant's arguments with respect to the Harbin reference had been considered in the Final rejection mailed August 7, 2006, the arguments were nonetheless considered upon examination of the After Final Amendment received October 10, 2006, and deemed to not place application in condition for allowance. In other words, the Examiner

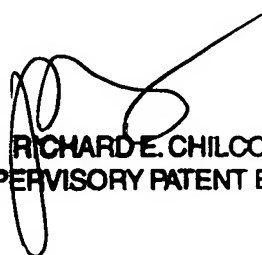
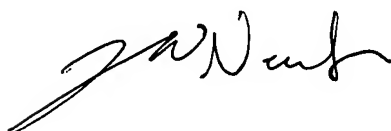
Art Unit: 3692

did not feel that Applicant's arguments overcame the Harbin reference, as applied in both the Final Rejection from August 7, 2006, and this paper.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jared W. Newton



**RICHARD E. CHILCOT, JR.**  
**SUPERVISORY PATENT EXAMINER**

Conferees:

Richard Chilcot



Vincent Millin

